Severe Summer Weather and Wildfire Preparedness Guide 2016

MORTON COUNTY

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NORTH DAKOTA

Introduction

The Morton County Office of Emergency Management publishes this guide with the hope that the information it contains will prove helpful for the safety of the residents of Morton County. The goal of ***"Severe Summer Weather and Wildfire Preparedness"*** is to inform Morton County residents on how to prepare for and stay safe in response to threatening severe summer weather conditions. We appreciate your efforts to share this critical and lifesaving information with your family and friends. Please feel free to photocopy and distribute the information included in this guide.

This guide contains vital safety information and severe/hazardous summer weather terms. This information is intended to prompt Morton County citizens to assess and evaluate their preparedness plans for home, school, work and during outdoor leisure activities.

This guide explains the threats and dangers of severe summer weather and wildfires and suggests life-saving actions ***YOU*** and family members can take this summer. With this information, ***YOU*** can better recognize summer weather threats, develop an action plan and be ready when severe summer weather threatens. Remember...your personal safety is up to ***YOU***.

The information contained in this guide is a compilation of public safety information published by the Federal Emergency Management Agency, the American Red Cross and the National Weather Service. To find additional materials on summer weather safety, try the following Web sites:

National Weather Service: www.weather.gov
Federal Emergency Management Agency: www.fema.gov
American Red Cross: www.redcross.org

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We are *Storm*Ready!

***Storm*Ready** is a nationwide community preparedness program sponsored by the National Weather Service (NWS) that uses a grassroots approach to help communities develop plans to handle all types of severe weather. The program encourages communities to take a new proactive approach to improving local hazardous weather operations by providing emergency managers with clear-cut guidelines on how to improve hazardous weather operations.

***Storm*Ready** communities are better prepared to save lives from the onslaught of severe weather by way of better planning, education and awareness. No community is storm proof, but ***Storm*Ready** can help communities save lives and protect property. In order to be officially certified by the NWS as ***Storm*Ready**, a county or community must:

- Establish a 24-hour warning point and Emergency Operations Center (EOC).
- Have more than one way to receive severe weather forecasts and warnings to alert the public.
- Create a system that monitors local weather conditions.
- Promote the importance of public readiness through community outreach and seminars.
- Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

Morton County is one of 21 counties and the city of Mandan is one of 18 communities in North Dakota recognized by the National Weather Service as ***Storm*Ready.**

When seconds count, *Storm*Ready communities are better prepared.

Emergency Communications Network (ECN):

What is CodeRED?
CodeRED is an Emergency Notification Solution that Morton County Agencies use to send out time sensitive information quickly and promptly.

Morton County will use the CodeRED system to keep you informed of emergency information that may impact your safety by sending you telephone calls or text messages. Severe summer weather events that will trigger a CodeRED notification are; Severe Thunderstorm Warnings, Tornado Warnings and Flash Flood Warnings, etc.

How do I sign up?
Below are two links that will direct you to our Morton County Emergency Management webpage, that will provide more information about CodeRED, and then a link to the sign-up page for CodeRED. You can also call the Morton County Emergency Management office at (701) 667-3307 for help signing up.

Morton County Emergency Management Webpage: http://tinyurl.com/jvhwo3u

CodeRED Community Sign-Up: http://tinyurl.com/os2lmrz

Note: When you do sign-up, please add the following phone numbers to your contacts in your mobile device so that you know that a CodeRED call is coming through.

CodeRED Emergency: 866-419-5000
CodeRED General: 855-969-4636

Frequently Asked Questions (FAQ):

When will CodeRED be used?
Any message regarding the safety of people, property, or welfare of the community will be disseminated using the CodeRED system. These may include missing person alerts, severe weather, tornado warning, hazardous materials alerts, and/ or boil orders.

Why did it leave only part of the message on my answering machine?
CodeRED will leave a message on an answering device. There are many different brands and types of capturing devices for leaving a message. Occasionally something about the answering device or the beep of the device caused the system to think it has reached a live person and begins playing the message. When a message is left, it only leaves part of the message. If this occurs, you can call back 1-866-419-5000 and receive the entire message.

Why did CodeRED call me several times?
If there is no answer and you do not have an answering device, the number will be attempted up to 3 times to relay the message.

IPAWS—Integrated Public Alert and Warning System

What is IPAWS?

During an emergency, alert and warning officials need to provide the public with life-saving information quickly. The Integrated Public Alert and Warning System (IPAWS) is a modernization and integration of the nation's alert and warning infrastructure and will save time when time matters most, protecting life and property.

Federal, State, Local, Tribal, and Territorial alerting authorities can use IPAWS and integrate local systems that use Common Alerting Protocol (CAP) standards with the IPAWS infrastructure. I PAWS provides public safety officials with an effective way to alert and warn the public about serious emergencies using the Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), the National Oceanic and Atmospheric Administration (NOAA) Weather Radio, and other public alerting systems from a single interface. Wireless Emergency Alerts (WEA), made available through the Integrated Public Alert and Warning System (IPAWS) infrastructure, are just one of the ways public safety officials can quickly and effectively alert and warn the public about serious emergencies.

What you need to know about Emergency Alert Systems (EASs)?

- The Emergency Alert System (EAS) is used by alerting authorities to send warnings via broadcast, cable, satellite, and wireline communications pathways.
- Emergency Alert System participants, who consist of broadcast, cable, satellite, and wireline providers, are the stewards of this important public service in close partnership with alerting officials at all levels of government.
- The EAS is also used when all other means of alerting the public are unavailable, providing an added layer of resiliency to the suite of available emergency communication tools.
- The EAS is in a constant state of improvement to ensure seamless integration of CAP-based and emerging technologies.

What you need to know about Wireless Emergency Alerts (WEAs)?

- WEAs can be sent by State and Local public safety officials, the National Weather Service (NWS), the National Center for Missing and Exploited Children, and the President of the United States.
- WEAs can be issued for three categories – imminent threat, AMBER alerts, and presidential alerts.
- WEAs look like text messages, but are designed to get your attention and alert you with a unique sound and vibration, both are repeated twice.
- WEAs are no more than 90 characters, and will include the type and time of the alert, any action you should take, as well as the agency issuing the alert.
- WEAs are not affected by network congestion and will not disrupt texts, calls or data sessions that are in progress.
- Mobile users are not charged for receiving WEAs and there is no need to subscribe.
- To ensure your device is WEA-capable, check with your service provider.

Outdoor Warning Siren Facts

With the chance of severe summer storms approaching, now is the time to familiarize ourselves on the purpose and use of Outdoor Warning Sirens. Outdoor sirens are an effective method of **outdoor** notification, however the system should not be relied upon for early warning for individuals indoors. Air-conditioning, thunder, high winds and rain can cause conditions for the sirens not to be heard when you are indoors.

The city of Mandan has 7 active outdoor sirens and the cities of Almont, Flasher, Glen Ullin, Hebron and New Salem each have sirens. These sirens can and will be activated by the Morton County Sheriff's Communications when the situation dictates.

When do the sirens sound?

Actual Events

- A confirmed **funnel cloud** has been spotted within 12 to 15 miles of your community.
- A confirmed **tornado** has been spotted within 12 to 15 miles of your community or
- The National Weather Service (NWS) has issued a **Tornado Warning** for Morton County or any of the specific cities in the track of the storm.
- The NWS predicts 80 mph wind gusts and/or golf ball (1.75 inch) or larger hail for Morton County to include the City of Mandan.

IMPACT...PEOPLE AND ANIMALS OUTDOORS WILL BE INJURED.

Testing **The outdoor warning sirens in Mandan are tested on the last Friday of each month at 9:30 a.m.**

What should I do when the sirens sound?

Seek shelter by going indoors in a basement, cellar or lowest level of the building. Monitor local news media (radio or television) for further information. If there is no basement, go to an inner hallway or room away from windows such as a bathroom or closet. Vehicles, mobile homes, shopping malls and auditoriums (any building with wide-span roofs) are not considered safe places to seek shelter.

Please refrain from calling the 9-1-1 Center to find out what the emergency is.
Only call 9-1-1 if you have an actual emergency situation.

How can I receive NWS information when I'm indoors or sleeping?

A great individual preparedness tool is a NOAA Weather Radio (NWR) which broadcasts continuous weather information 24 hours a day, 7 days a week. This radio will provide alerts as soon as they are issued by the National Weather Service.

See page 8 if this guide for more detailed information about NOAA Weather Radios and their functions.

Nature's Most Violent Storms…Thunderstorms, Tornadoes and Lightning

Who's Most At-Risk From Thunderstorms?

From Lightning…

People who are outdoors, or anyone who stays outdoors when thunderstorms are nearby.

From Tornadoes… Nature's Most Violent Storms

People who are in campers, mobile homes or outdoors.

From Flash Floods and Flooding…

People who walk or drive through flood waters.

From Large Hail…

People who are caught outdoors.

Morton County Severe Storm Statistics (1950—2015)

Tornadoes: Total of 48. Deaths—2 in May 1953. Injuries—20 in May 1953. Highest rated tornado: from 2007 to present— EF1 (86 to 110 mph) June 2010, 5.1 miles West-Southwest of Mandan airport. No deaths or injuries. Grain bins destroyed and crop damage estimated at $250,000. Estimated wind speeds were 95 mph. Highest rated tornado from 1950—2006: F5 (261 to 318 mph) May 1953, near Fort Rice. There were 2 deaths and 20 injuries.

Wind Speed: Highest wind speed (non-tornadic thunderstorm gust) was 100 mph in June 1999, 2 miles Southeast of St. Anthony. Damage resulted in 6 downed power lines.

Hail: Largest hailstone 4.50 inch diameter in July 1986. No listed location.

The above data was compiled and provided by the National Weather Service Office in Bismarck.

Getting to Know Spring and Summer Weather Terms

It's important to become familiar and understand the National Weather Service (NWS) terms that are frequently used in summer weather forecasts. If you are in the alerted area, check your TV or listen to your local radio station or a weather radio for the most up-to-date advisories. Knowing these key weather terms enables you to take the necessary precautionary measures during severe summer weather forecasts. If you have a smartphone, weather applications are very useful.

WATCH— A product of the NWS indicating that conditions are favorable for the development of a particular severe weather event. A watch is normally issued for several hours, 6 hours being the most common. A watch indicates a need for planning, preparation and an increased awareness of changing weather conditions. Typical "watches" include:

- Severe Thunderstorm Watch
- Tornado Watch
- Flash Flood Watch
- Fire Weather Watch

WARNING— A product of the NWS indicating that a particular weather hazard is either imminent or occurring. A warning indicates the need to take action to protect life and property. Typical "warnings" include:

- Severe Thunderstorm Warning
- Tornado Warning
- Flash Flood Warning
- Red Flag Warning (Fire Danger)

WEATHER STATEMENTS— Issued as either "special or severe." A special statement is when the weather forecaster wants to pass information on to the public about developing or approaching weather that is not expected to be severe, but nonetheless is significant. A severe weather statement is used when a forecaster wants to follow up a warning with more specific information on the progress, location, etc. of the severe weather warning that was originally issued.

URBAN AND SMALL STREAM FLOOD ADVISORY— Alerts the public to flooding which is generally only an inconvenience (not life-threatening) to those living in the affected area. Issued when heavy rain will cause flooding of streets and low-lying places in urban areas. Also used if small rural or urban streams are expected to reach or exceed their banks. Some damage to homes and roads could occur.

FLASH FLOOD WARNING— Signifies a dangerous situation where rapid flooding of rivers, small streams or urban areas is imminent or is occurring. Very heavy rain that falls in a short time period can lead to flash flooding, depending on local terrain, ground cover, degree of infrastructure and/or man-made changes to river banks and initial ground or river condition.

The National Weather Service has issued a Severe Thunderstorm Warning for the following counties in ND—Burleigh; Grant; Mercer; Morton; Oliver; Sioux; Stark; until 9:00 p.m. (CST), June 5, 2016. Stay tuned for updated reports.

Getting to Know Spring and Summer Weather Terms

SEVERE THUNDERSTORM WATCH— Conditions are favorable for the development of severe thunderstorms in and close to the watch area. Watches are usually in effect for several hours, with 6 hours being the most common. Thunderstorms are accompanied by lightning and thunder and usually with strong wind gusts, heavy rain and sometimes hail.

SEVERE THUNDERSTORM WARNING— Issued when a thunderstorm produces hail 1inch or larger in diameter and/or winds equal to or exceeding 58 mph. Severe thunderstorms can result in the loss of life and/or property. Information in this warning includes: where the storm is, what cities will be affected and the primary threat associated with the storm.

TORNADO WATCH— Conditions are favorable for the development of tornadoes in and close to the watch area. Watches are usually in effect for several hours, with 6 hours being the most common.

TORNADO WARNING— A tornado is indicated by radar or sighted by storm spotters. The warning will include where the tornado is spotted and what cities are in its path and the anticipated impact.

RED FLAG WARNING— A term used by fire-weather forecasters, to call attention to weather conditions of particular importance that would result in a rapid spread of fire. A Fire Weather Watch may be issued prior to the warning. The criteria for Red Flag events requires the combination of high to extreme fire danger and critical fire weather pattern such as: dry lightning, low relative humidity, very dry and unstable air, and very strong/shifting winds.

How to Stay Informed!

KEEP INFORMED
OF
THE STORM
by listening to a NOAA Weather Radio, local radio, television or cell phone applications for the latest summer storm advisories, watches and warnings in your area.

Radio, television and the internet are all good sources of weather data. However, if you want the most accurate and timely information, go to the source itself. You can listen to a weather radio designed to pick up broadcasts of the National Oceanic and Atmospheric Administration (NOAA).

Commonly referred to as, NOAA Weather Radio All Hazards (NWR), it provides continuous broadcasts of the latest weather information directly from the local National Weather Service offices. These broadcasts are tailored for your specific geographical area. The radios can be purchased from many local outlet, electronic, and sporting goods stores and catalogs.

An important feature is that the NWR will automatically turn itself on to alert you when a watch or warning has been issued, no matter what time of day or night. The newer radios can be programmed specifically for your county and some of the radios let you program specifically which alerts/hazards you choose to receive.

The following National Weather Service Web site has additional information on the radios and their programming codes: **http://www.nws.noaa.gov/nwr**

NWS Statement = Get Ready

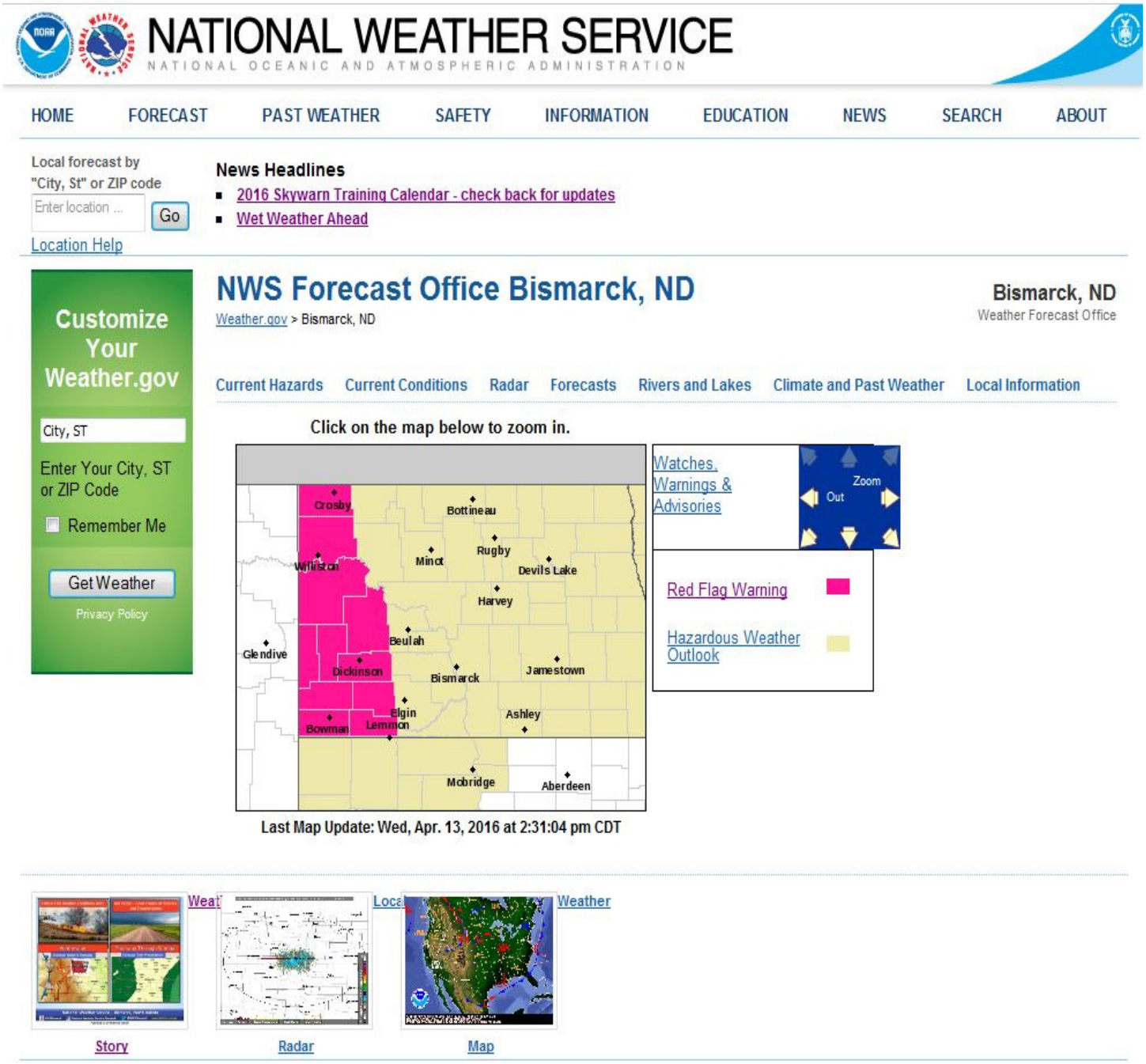
NWS Watch = Get Set

NWS Warning = STOP what your doing and take action!

Your "One Stop Shop" for Weather Information

The Bismarck office of the National Weather Service provides a variety of daily weather products on their Web site to inform the public of weather conditions and to help you prepare for weather emergencies. If you are planning activities, this Web site will assist you preparing for "what's happening" or what's predicted for the near future. We encourage you to visit this site and take a look at the wide variety of meteorological data that is at your finger tips. The Web site is:

http://www.weather.gov/bis/



Tornadoes… What Should You Do?

In the event of severe weather in your immediate area, first and foremost, stay tuned to local news media outlets for warnings and/or listen to your weather radio or CodeRED notification messages.

In a House with a Basement: Avoid windows and get in the basement under sturdy protection. If possible cover yourself with a mattress or sleeping bag. Know where heavy objects are located on the upper level (e.g. pianos, refrigerators, waterbeds, etc.) and avoid being directly under them.

In a House with no Basement: Avoid windows. Go to the lowest floor, small center room, like a bathroom or closet, under a stairwell, or in an interior hallway with no windows. Crouch as low as possible to the floor, face-down and cover your head with your hands.

In an Apartment or Condo: If you live in an upper floor apartment, get to the lowest level that you can. This could be either a neighbor's first floor, basement apartment, or an underground parking garage. Then move to the most interior area away from windows. If you live in a high-rise apartment building, and you can't get to a lower level, pick a place in the hallway in the center of your building such as a stairwell. If that is not available, then a closet, bathroom or interior hall without windows is the safest place. Power loss during a severe storm is common, so avoid using elevators and keep a flashlight handy.

In an Office Building, Hospital or Store: Follow the instructions provided from facility managers. Go directly to an enclosed, windowless area in the center of the buildings lowest floor. Interior stairwells provide good places for shelter. Avoid using elevators.

At a School: Follow the school's designed storm drills. Go to the interior hallway or room in an orderly way as instructed by the school staff. Crouch low, head down, and protect the back of your head with your arms. Stay away from windows and large open rooms like gyms and auditoriums.

In a Vehicle: If the tornado is visible, far away, and the traffic is light, you may be able to drive away from its path by moving at right angles to the tornado. Otherwise, park the vehicle as safely as possible out of traffic lanes. Get out and seek shelter in a sturdy building. If in the open country, run to low ground away from any vehicles. Lie flat and face-down, protecting the back of your head with your arms. Avoid seeking shelter under bridges or in large culverts which can accelerate the wind speed and flying debris.

In the Open Outdoors: If possible, seek shelter in a sturdy building. If not, lie flat and face-down on low ground, protecting the back of your head with your arms. Get as far away from the trees and vehicles as you can.

In a Church or Theater: If possible, move quickly but orderly to an interior bathroom or hallway, away from windows. Crouch face-down and protect your head with your arms. If there is no time to do that, get under the seats or pews, protecting your head with your arms and hands.

In a Mobile Home: GET OUT! Even if your home is tied down, you are probably safer outside, even if the alternative is to seek shelter out in the open. Most tornadoes can destroy even tied-down mobile homes. If there is a sturdy permanent building within easy running distance, seek shelter there. If you don't have transportation to public tornado shelters, make pre-arrangements for someone to drive you. If you have friends or relatives in the close proximity with basements, make arrangements to shelter with them. Also, always check with the mobile home park property managers to determine what plans are in place for tornado sheltering.

The City of Mandan has identified public tornado shelters at the Morton County Courthouse and Mandan City Hall. If conditions permit, go there fast.

The Enhanced F Scale for Tornado Damage

The National Weather Service uses the Enhanced F-Scale to assign a tornado a "rating" based on estimated wind speeds and related damage caused by the tornado.

EF Rating	3 Second Wind Gust (MPH)	TYPICAL DAMAGE
0	65-85 mph	**Light Damage:** Some damage to chimneys; branches breaking off trees; shallow rooted trees pushed over; sign boards damaged.
1	86-110 mph	**Moderate Damage:** Peels surface off roofs; mobile homes pushed off foundations or over-turned; moving vehicles blown off roads.
2	111-135 mph	**Considerable Damage:** Roofs torn off frame houses; mobile homes demolished; boxcars overturned; large trees snapped or uprooted; light-object debris/projectiles generated; vehicles lifted off the ground.
3	136-165 mph	**Severe Damage:** Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forested areas uprooted; heavy vehicles lifted off the ground and thrown.
4	166-200 mph	**Devastating Damage:** Well-constructed houses leveled; structures with weak foundations blown away some distances; vehicles thrown and large debris/projectiles generated.
5	201 + mph	**Incredible Damage:** Strong frame houses leveled off foundations and swept away; automobile-sized projectiles fly through the air in excess of 10 yards; trees debarked; incredible phenomena will occur.

Tornado Safety in Schools

Every School Should Have a Severe Weather Safety Plan

√ Develop a severe weather safety plan that ensures everyone will take cover within 60 seconds. Conduct frequent tornado drills. Include provisions for all after-hours, school related activities.

√ Every school should be inspected and tornado shelter areas designated by a registered engineer or architectural firm. Rooms with exterior walls should never be used as tornado shelters.

√ Basements offer the best protection. Schools without basements should use interior rooms and hallways on the lowest floor, away from windows.

√ Delay lunches and assemblies in large rooms if severe weather is anticipated. Rooms with large roof spans (e.g. gymnasiums, cafeterias and auditoriums) offer little protection from tornado-strength winds.

√ Ensure students and staff know the protective position (as shown here). Everyone should kneel facing an interior wall, elbows to knees, and with hands over the back of their heads.

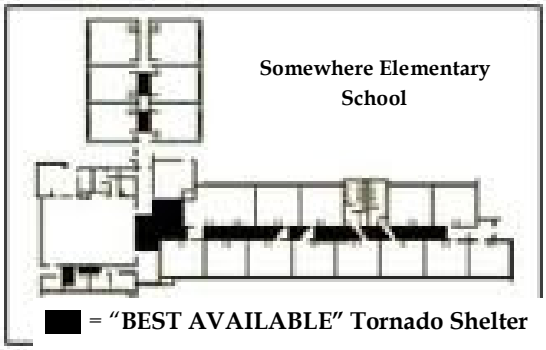
√ Each school should have a NOAA Weather Radio with battery back-up. Note, the NWS issues a *"Tornado Watch"* when conditions are favorable for tornado development and a *"Tornado Warning"* when a tornado has been spotted or indicated by weather radar.

√ If the school's alarm system relies on electricity, have an alternative method to notify teachers and students in case of power failure.

√ Make special provisions for faculty and students with disabilities, those in portable classrooms and those outdoors. They should be notified first of approaching severe weather.

√ Keep children at school beyond regular hours during a *"Tornado Warning."* School bus drivers should identify protective areas along each part of their route they and their passengers can take cover if overtaken by a tornado or high winds.

√ Include properly designed tornado shelters when planning additions or new school buildings.



Hospitals, nursing homes and other institutions should develop similar severe weather safety plans.

Lightning Kills—Play it Safe

There is no safe place outside in a thunderstorm. If you hear thunder, lightning is close enough to strike you. Plan ahead to avoid this dangerous situation! If you are outside and hear thunder, the only way to significantly reduce your risk of becoming a lightning casualty is to get inside a substantial building or hard-topped metal vehicle as fast as you can. In addition you should avoid the following situations which could increase your risk of becoming a lightning casualty.

Remember—there is no substitute for getting to a safe place.

Caught in a Thunderstorm—What You Should Know

- **Avoid open areas**—Don't be the tallest object in the area. Get off elevated areas such as hills, ridges or peaks.
- **Get out and off bodies of water**—Immediately get out and away from ponds, lakes and other bodies of water.
- **Stay away from isolated tall trees, towers or utility poles**—Lightning tends to strike the taller objects in an area.
- **Stay away from metal conductors such as wires or fences**—Metal does not necessarily attract lightning, but lightning can travel long distances through it.
- **As a group of people, spread out**—While this actually increases the chance that someone might get struck, it tends to prevent multiple casualties, and increases the chances that someone could help if a person is struck.

Act Fast If Someone Is Struck By Lightning!

- **Lightning victims do not carry an electrical charge, are safe to touch and need urgent medical attention**—Cardiac arrest is the immediate cause of death. Some deaths can be prevented if the victim receives the proper first aid immediately.
- **Call for help**—Call 9-1-1 or contact on-site medical personnel.
- **Give first aid**—Do not delay giving CPR if the person is unresponsive or not breathing. Use an Automatic External Defibrillator (AED) if one is available.

When Should Activities be Stopped and Resumed?

- The sooner the activities are stopped and people get to a safe place, the better.
- In general, a significant lightning threat exists from the base of a thunderstorm 6 to 10 miles. Therefore, people should move to a safe place when a thunderstorm is 6 to 10 miles away.

Use the "30-30 Rule"

- If the time between seeing lightning and hearing corresponding thunder is **30 seconds** or less, this indicates the thunderstorm is 6 miles or less and lightning is close enough to hit you.
- Because electrical charges can linger in clouds after a thunderstorm has passes, experts agree that you should wait **30 minutes** after the storm to resume activities.

Lightning Facts

How Far Away Is the Lightning?

- Count the number of seconds between a flash of lightning and the sound of the resulting thunder, "Flash to Bang" method.
- Then divide this number by 5 to get an estimate of the distance in miles to the lightning strike. Example: If you see lightning and it takes 10 seconds before you hear the thunder, then the lightning is 2 miles away from you (10 divided by 5 = 2 miles).
- Remember if you are outdoors and can hear thunder, you are in danger of being struck by lightning.

Lightning Fiction and Fact	
FICTION:	If it is not raining, then there is no danger from lightning.
FACT:	Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall. This is especially true in some parts of the state where thunder-storms sometimes produce very little rain.
FICTION:	The rubber soles of shoes or rubber tires on a car will protect you from being struck by lightning.
FACT:	Rubber-soled shoes and rubber tires provide **NO** protection from lightning. The steel frame of a hard-topped vehicle provides increased protection if you are not touching the metal. Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.
FICTION:	People struck by lightning should not be touched because they carry an electrical charge.
FACT:	Lightning-strike victims **DO NOT** carry an electrical charge and should be helped immediately. Anyone who has been hit by lightning requires immediate professional medical care. Call 9-1-1 and begin CPR immediately if the person has stopped breath-ing. Use an Automatic External Defibrillator (AED) if one is available.
FICTION:	"Heat lightning" occurs after very hot summer days and poses no threat.
FACT:	"Heat lightning" is a term used to describe lightning from a thunderstorm too far away for the thunder to be heard.

Hailstorm Safety Measures

Do you know what to do in a hailstorm?

Summer hailstorms can be violent and destructive. Usually occurring in the late afternoon or early evening after a hot day, these storms are accompanied by thunder, lightning, high winds and often flash floods. A hail storm usually only lasts about six minutes.

Hail Size Estimates (in diameter)		
Marble/Moth Ball = 1/2 inch	Half Dollar = 1-1/4 inches	Tennis Ball = 2-1/2 inches
Penny = 3/4 inch	Walnut/Ping Pong = 1-1/2 inches	Baseball = 2-3/4 inches
Nickel = 7/8 inch	Golf Ball = 1-3/4 inches	Tea Cup = 3 inches
Quarter = 1 inch	Hen Egg = 2 inches	Softball = 4-1/2 inches

…in an automobile:

- **Stop driving.** If you can see a safe place close-by to drive to (like inside a garage or under a service station awning), do so as soon as possible. If on a highway, make sure you pull completely off the highway.
- Do NOT leave the vehicle until it stops hailing. Your car will provide reasonable protection.
- Stay away from car windows. Cover your eyes with something (piece of clothing or blanket) or lay down on the seat with your back to the windows. Put very small children under you, and cover their eyes.

…in a building:

- Seek shelter immediately in a sturdy building. Stay inside until the hail stops.
- Stay away from skylights and windows, especially windows that are being struck by hail.
- Account for all family members, building occupants, pets, etc. Do not go outside for any reason. Large hail can cause serious, or even fatal injuries.
- Avoid using phones and electrical appliances during a severe storm to avoid the danger of electrocution from lightning.

…outdoors:

- If you are caught outdoors, seek shelter immediately. If you can't find something to protect your entire body, at least find something to protect your head.
- Stay out of culverts and lowland areas that might suddenly fill/flood with water.
- Trees are a last resort. It is common during severe storms for trees to loose branches. Also, large isolated trees attract lightning.

Large hailstones can fall at speeds faster than 100 mph!

Flood Safety Checklist

Flash floods occur suddenly (usually less than 6 hours) due to rapidly rising water along streams or low-lying areas. Conditions that cause floods include heavy or steady rain for several hours or days that saturates the soil.

Know the Difference

Flood/Flash Flood Watch—Flooding or flash flooding is possible in your area.

Flood/Flash Flood Warning—Flooding or flash flooding is already occurring or will occur in your area.

What should I do?

- Listen to local radio/TV stations and a NOAA Weather Radio.
- Be prepared to evacuate at a moments notice.
- When a flood/flash flood warning is issued, head for higher/safe ground and stay there.
- Stay away from floodwaters. If you come upon a flowing stream where water is above your ankles, stop, turn around and go another way. Six inches of swiftly moving water can sweep you off your feet.
- If you come upon a flooded road while driving, turn around and go another way. If you are caught in a flooded road and water is rising rapidly, get out of the car and quickly move to higher ground. Most cars can be swept away by less than two feet of moving water.
- Keep children out of water. They are curious and often lack judgment about running or contaminated water.
- Be especially cautious at night when it is harder to recognize flood dangers.
- Because standard homeowners insurance doesn't cover flooding, it's important to have extra protection for flooding. For more information on flood insurance, visit the National Flood Insurance Program Web site at **www.FloodSmart.gov.**

What supplies do I need?

- Water—at least a 3-day supply; one gallon per person per day.
- Food—at least a 3-day supply of non-perishable easy to prepare food. Baby supplies as needed.
- Flashlights and battery powered radio. (NOAA Weather Radio, if possible). Extra batteries for each.
- Medications (7 day supply) and other medical items needed.
- Sanitation and personal hygiene items.
- Cell phone with chargers.
- Family and emergency contact information.
- Extra cash.
- Extra clothing items.
- Pet supplies (collar, leash, ID tag, food, medications and carrier).
- Extra set of car keys and house keys.
- Camera for photos of damage.

What do I do after a flood?

- Return home only when local officials have declared the area safe.
- Parts of your home may be damaged or collapsed. Approach entrance carefully. See if porch roofs and overhangs have all their supports.
- If you smell natural or propane gas or hear a hissing noise, leave immediately and call 9-1-1.
- Keep children and pets away from hazardous sites and floodwater.
- Material such as cleaning products, paints, batteries and contaminated fuel are hazardous materials. Check with local authorities for assistance with disposal to avoid risk.
- During cleanup, wear protective clothing, including rubber gloves, rubber boots and breathing masks.
- Make sure food and water are safe. Discard items that have come into contact with floodwater, including canned goods, water bottles, plastic utensils, and baby bottle nipples. **When in doubt, throw it out!**
- Do not use water that could be contaminated to wash dishes, brush teeth, prepare food, wash hands, make ice or make baby formula.
- Contact your local public health department for specific recommendations on treating water and clean-up procedures.

Having a Sump Pump...Priceless

Frequently Asked Questions

Q: Who needs a sump pump?
A: If you have a basement that floods you need one. A sump pump in your home will prevent, basement, laundry areas, and storage rooms from receiving water damage.

Q: What is the most common reason for sump pump failure?
A: The leading cause for sump pump failure tends to be a switching problem. Sometimes the pump can shift inside the basin causing the float that operates the switch to lodge against the side. Debris can also be a factor; it can interfere with the action of the pump switch. It is important to make sure that your pump switch and float arm assembly move freely.

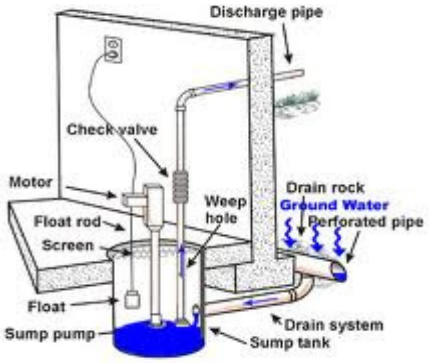
Q: Can the pump burn out if the outdoor (discharge) pipe is frozen shut?
A: In that type of situation it will generally overheat if not remedied. Almost all sump pump motors have thermal protection built in. The thermal relay will reset itself when turned off, and thus be allowed to cool down.

Q: How can I check my sump pump to see if it is working?
A: First you have to make sure your outlet pipe is not frozen shut or plugged, and that it directs the water away from the house. Take a look inside the sump pump basin by opening the lid, and make sure it is clean inside and that there is no debris causing the pump inlet to be plugged. Next look for the on/off switch, then poor about five gallons of water into the sump, and listen to the pump. Make sure the float switch turns the sump pump on and off at least twice.

Q: How often should I check, run or test my sump pump?
A: Some manufacturers recommend every two to three months and others recommend that a yearly cleaning program be completed before the spring thaw and rainy season hits.

Q: What is a Sump Pump Alarm?
A: A sump pump alarm is a device that is triggered when the sump pump stops working, or when water reaches a certain level in your basement. It functions much like a smoke alarm – loud and startling. Its purpose is to warn you of an impending flood.

Pedestal Pump



Floor Sucker Pump

Septic Systems and Flooding

Flooding can cause problems for homes with individual septic/drainfield systems. If drains in the house run slowly or are backing up, pumping the septic tank will provide at best three or four days of reprieve, but the problem will return. The saturation of soil in the drainfield area from surface flooding doesn't allow for surface evaporation or natural soil percolation, thus the drainfield remains saturated with waste water. This causes water to back-up throughout the entire home sewer system.

If your drainfield area is flooded or very saturated you might notice some of the following issues:

- Drains in the house will run slow.
- Toilets drain slowly or sound strange when flushed.
- Water may back-up into floor drains in the basement.

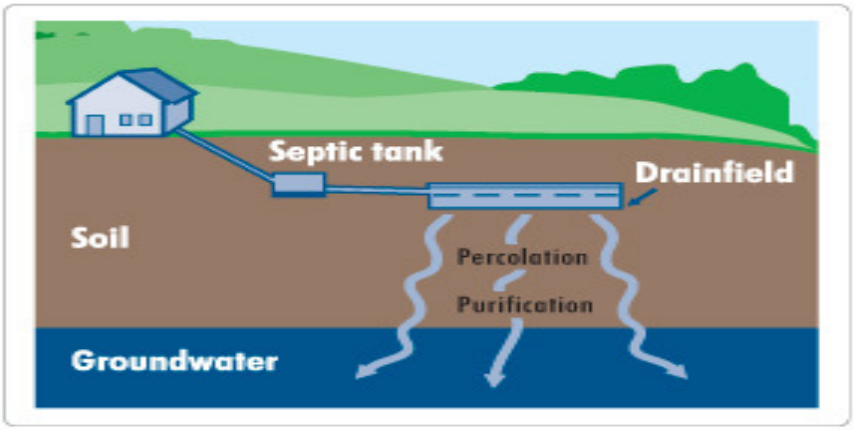
Under flooded or saturated drainfield conditions, **do not** have the septic tank pumped! At best, pumping the tank is only a temporary solution. Under the worst conditions, pumping it could cause the tank to try to float out of the ground and damage the inlet and outlet pipes.

What you can do to minimize the problem

The best solution is to plug all drains in the basement and drastically reduce water use in the house. Some suggested ways:

- Don't put water from a basement sump pump into the septic system.
- Don't let water from roof gutters or sump pump discharge onto the drainfield area.
- Reduce the number of times you flush the toilet. A good rule might be to limit one flush per person per day.
- Reduce the number of showers and baths.
- Don't use the garbage disposal or dishwasher.
- Don't do laundry, use a Laundromat if possible.

Common sense is the key to reducing water use in the home. Remember, the drainfield was designed to infiltrate the amount of water normally discharged from the house. When additional water from rain, snow, or flooding is added to the drainfield, its ability to handle household water becomes seriously limited.



Wildfire Prevention Tips

Did you know?
Most wildfires are caused by lightning during extreme dry weather or drought conditions.
However, an alarming number of fires are ignited by acts of human carelessness. Here are some helpful tips to follow:

What is the safest way to build, maintain and extinguish a campfire?

- Check the ND Fire Danger Rating (see Web site on page 20 of this guide) to determine the fire category for the day you are having a campfire to see if campfires are restricted or prohibited.
- Clear campfire site down to bare soil and circle the campfire pit with rocks/bricks.
- Build campfires away from overhanging branches, steep slopes, dry grass, leaves and debris.
- Keep a bucket of water and a shovel nearby.
- Never leave a campfire unattended.
- When putting out the campfire, drown the fire with water, stir, and drown it again.
- Always have an adult present to supervise outdoor fires/cooking.
- Be careful with gas lanterns, grills, gas stoves and anything that can be a source of ignition.

Where can I use fireworks on public lands?

- The use of fireworks is strictly **prohibited** on ALL Federal and State public lands. **(NOTE— The use of Luminary Fireworks are now prohibited in the Mandan City limits.)**

What is the safest way to burn trash?

- Check the ND Fire Danger Rating to determine the fire category for the day you want to burn to see if open burning is restricted or prohibited by a local burn ban.
- Burn trash in a safe incinerator that includes: Heavy mesh screen with holes not much larger than 1/4 inch, and a metal barrel in good condition.
- Clear the area of flammable material at least 10 feet around the incinerator.

How do I safely operate an on or off-road vehicle on public lands when the fire potential is high?

- Check the ND Fire Danger Rating for local conditions to see if off-road travel is restricted or prohibited due to fire conditions.
- Avoid driving and parking your vehicle in tall dry grass.
- Never throw a lit cigarette out the window of a vehicle.
- Grease trailer wheels, check tires and ensure safety chains are not touching the ground.
- All off-road vehicles require a spark arrester and should be checked and cleaned periodically.
- Carry a shovel and fire extinguisher in your vehicle or Off Highway Vehicle (OHV)/All Terrain Vehicle (ATV).

What can kids do to help prevent wildfires?

- Never let children play with matches, lighters, flammable liquids or any fire.
- Educate your children and friends about fire prevention in the outdoors.
- Stay calm during an emergency, and listen to instructions from parents or another person who is in charge during outdoor activities.

Wildfire Prevention and Preparedness

It's common practice in North Dakota during spring, summer and fall to burn fields, trees and debris in agricultural and rural settings. Another common practice is for outdoor enthusiasts to build campfires while enjoying the state's outdoor recreational opportunities. For increased awareness and to greatly reduce the chance that rural fires will threaten lives and property, the U.S. Forest Service issues the North Dakota Fire Danger Rating in the spring/summer/fall months daily.

North Dakota Fire Danger Rating

This Rating serves as a guide to reduce the number of uncontrollable outdoor fires. The Rating is a forecast of fire potential for grasslands, including its ability to spread. The rating contains five levels: **Low, Moderate, High, Very High and Extreme.** The U.S Forest Service calculates the Fire Danger Rating for each county daily, using vegetative greenness and forecast temperature, humidity and wind speed and posts this information to the National Weather Service Web site.

Index Rating	Fire Danger Description
Low	Weather and fuel indicators show low probability for erratic fire behavior.
Moderate	Some potential for erratic fire behavior with moderate rates of spread should a fire ignite.
High	Fires which ignite may be active. Expect moderate and occasional high rates of spread.
Very High	Fires spread rapidly and show erratic behavior. Dangerous burning conditions exist.
Extreme	Potential for large fires exists. Extreme fire behavior is probable. Critical burning conditions exist.

The NWS updates the North Dakota Fire Danger Map and Forecast throughout the day as weather conditions warrant during the fire season, typically April 1 to October 31. This information and the current fire danger ratings are available on the following Web site:

http://www.weather.gov/bis/fire

First Offense of a burn ban is a Class B misdemeanor: up to 30 days in jail and a $1,500 fine.

Controlled Burn Procedures

Morton County Controlled Burn Procedures

The Morton County Office of Emergency Management has issued the following procedures for landowners, contractors, equipment operators and outdoor enthusiasts when engaged in open area controlled burning situations. These precautions are to ensure that open burning is coordinated with the proper authorities for maximum safety to people and property.

- Citizens should contact the Morton County Sheriff's Department Communications at 667-3405 **before** a controlled burn is started so that emergency responders are not dispatched for reports of fire, when in fact it is a controlled burn. Be prepared to give your name, contact number, location of controlled burn and anticipated duration of the burn. **After** the burning is completed and the fire is out, again contact the Morton County Sheriff's Department Communications to inform them of the completion.

- Controlled burns need to be physically monitored at all times. Once the fire has been started, do not leave the site unattended until the fire is completely out.

- **Be prepared if the fire gets out of hand.** Call 9-1-1 immediately and have resources available to mitigate the effects (e.g. tractor, digger, shovels, etc.).

Residents are urged to follow the precautions as listed in the outdoor activity guidelines for the five fire danger ratings (Low, Moderate, High, Very High and Extreme) on page 22 of this guide.

Open burning is prohibited when the Fire Danger Rating is in the High, Very High, and Extreme and Red Flag Warning Category.

Pre-burn Checklist

√ Are there any local restrictions or burn bans for my city/county?

√ Have I looked at the weather for the day of the burn and the next day?

√ Have I notified the proper authorities prior to burning?

√ Do I have a plan if the fire gets away and have I communicated the plan to those helping me?

√ Do I have adequate water/equipment/people to help keep the fire under control?

√ Does the burn area pose potential danger to other persons and property?

√ Do I have a large enough clear zone?

√ Am I willing to take legal and financial responsibility if the fire gets away?

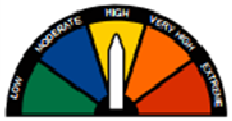
√ Am I adequately insured to cover potential liability and/or losses?

Fire Danger Guide Suggestions and Restrictions

During severe, extended dry conditions, or drought the Governor may issue a proclamation mandating these restrictions. Fines and other penalties may be assessed for failing to comply. Local governments may institute burn bans and reference these restrictions regardless of fire danger and independent of a Governor's proclamation. Local bans may be more restrictive but not less than what is identified in the state proclamation for the same area.

It is critical that you verify the current rating and local burn bans/*restrictions BEFORE burning and participating in outdoor activities.*
Many counties have reporting requirements prior to burning. Information about current fire danger ratings is available through county sheriff offices, the National Weather Service (www.weather.gov/bis/fire or www.weather.gov/fgf/fire), or the ND Department of Emergency Services (www.nd.gov/des).

Restrictions are mandatory when a proclamation is active and highly advised when not.



Fire Danger / Activity Category	Open Burning	Recreation Fire	Fireworks	Device Controlled	Smoking	Equipment/Vehicles
Low	S1	S1	S1	S 1	S 1	S 1
Moderate	S 1 S 2	S 1 S 4	S 1	S 1	S 1	S 1
High		S 1 S 2 S 3 S 4	S 2 S 3	S 1 S 2 S 3	S 1	S 2 S 3
Very High				R 1 S 1	R 2	R 3
Extreme				R 1 S 1 S 3	R 2	R 4
Red Flag Warning				R 1 S 1 S 3	R 2	S 2 S 3 R 3 R 4

The US Forest Service issues the North Dakota Fire Danger Rating each morning (6:45 CST) during fire season; typically from April 1 to October 31. The USFS calculates the Fire Danger Rating using grassland fuel moisture, forecast temperature, humidity, and wind speed.

Suggested Actions - Consider these precautions when a fire proclamation or burn ban is active.

S 1 - Monitor activity.
S 2 - Have basic hand tools available for quick response.
S 3 - Have extinguisher or water available on site.
S 4 - Fire should be contained in fire ring or organic material removed from immediate area.

Restrictions - The restrictions below apply to the area identified in proclamation issued by the governor or local authority.

R 1 - Allowed when device is on a hard non-organic surface 15 feet away from dry vegetation.
R 2 - Restricted to inside of vehicles, hard surface areas, homes, or in approved buildings.
R 3 - All recreational off road travel is restricted
R 4 - Off road travel is restricted to land owners and facility owners or their employees who need to maintain property, crops, and livestock.

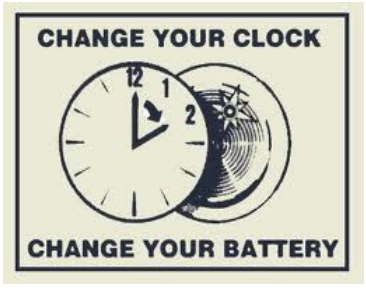
Household Fire Prevention

Fire Prevention

- Make sure your house number is clearly visible for firefighters to see and read.
- Install smoke detectors outside all sleeping areas or in each bedroom and on every level of your home, including the basement.
- Install A-B-C type fire extinguishers and teach each family member how to use them.
- Check smoke detectors on a regular basis and replace the batteries twice a year. A good schedule is during the spring and fall time changes.
- Be familiar and know the locations of all exits, including windows.
- Plan an escape. Know two ways out of every room in case flames/smoke block the primary exit.
- Choose a meeting place outside the home and account for all family members. If someone is missing, let the fire department know, don't go back inside.
- Mark bedroom windows outside of the building of children and others who may not be able to self-rescue.
- Learn how to turn off gas and electricity in an emergency.

If Fire Strikes

- If there is a fire—evacuate and call 9-1-1 from a cell phone or your neighbors house.
- Never use water on an electrical fire.
- If caught in smoke, drop to your hands and knees and crawl. Breathe shallowly through your nose and use clothing or cloth as a filter.
- If you are forced to advance through flames, hold your breath, move quickly, cover your head and hair, keep your head down and close your eyes as much as possible.
- If your clothes catch fire, **"Stop—Drop and Roll"** until the fire is out.
- Smother oil and grease fires in the kitchen with baking soda or salt and put a lid over the flame to starve the oxygen. Never throw water on an oil/grease fire.
- If you're are in a room and cannot escape, close the door, stay low to the floor and talk to firefighters to signal your presence.



Heat Wave Safety Checklist

How Can I Prepare?

- Listen to local weather forecasts and stay aware of upcoming temperature changes.
- The heat index is the temperature the body feels when the effects of heat and humidity are combined. Exposure to direct sunlight can increase the heat index by as much as 15 ° F.
- Discuss heat safety precautions with members of your family.
- Know those in your neighborhood who are elderly, young, sick or overweight. They are more likely to become victims of excessive heat and may need assistance.
- If you do no have air conditioning, choose places you could go for relief from the heat during the warmest part of the day (schools, libraries, theaters, malls, etc.).
- Get trained in first aid to learn how to treat heat-related emergencies.
- Ensure that animal's needs for water and shade are met.

What Should I Do During a Heat Wave?

- Listen to the NOAA Weather Radio for critical updates from the NWS.
- Never leave children or pets alone in enclosed vehicles.
- Stay hydrated by drinking plenty of fluids even if you don't feel thirsty. Avoid drinks with alcohol or caffeine.
- Eat small meals and eat more often.
- Wear loose-fitting, lightweight, light colored clothing. Avoid dark colors because they absorb the sun's rays.
- Slow down physical activity, stay indoors if possible, and avoid strenuous activity during the hottest part of the day.
- Use a buddy system when working in excessive heat.
- Take frequent rest breaks if you must work outdoors.
- Check on family, friends and neighbors who spend much of their time alone or who are more likely to be affected by the heat.
- Check on your animals frequently to ensure they are not suffering from the heat.

Recognize and Care For Heat Related Emergencies…

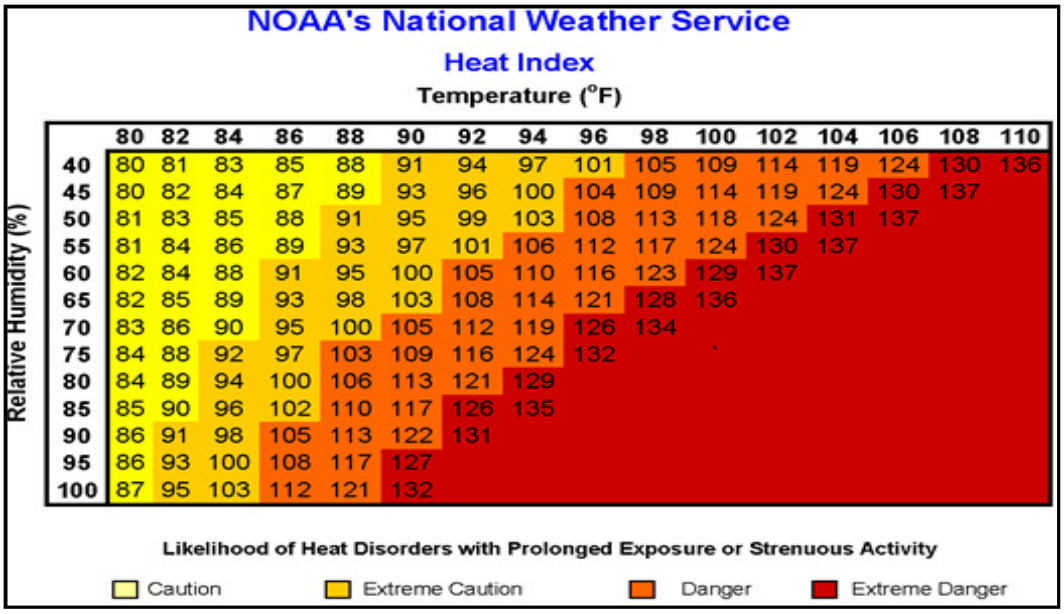
- **Don't get too much sun.** Sunburn makes the job of heat dissipation by the body much more difficult.
- **Sunburn** Redness of the exposed skin and pain. In severe cases, you will have swelling of skin, blisters, fever and headaches.
- **Heat Cramps** are muscular pains and spasms that usually occur in the legs and abdomen caused by exposure to high heat and high humidity and loss of fluids and electrolytes. Heat cramps are often an early sign that the body is having trouble dealing with the heat.
- **Heat Exhaustion** typically involves the loss of body fluids through heavy sweating during strenuous exercise or physical labor in high heat and humidity.
- **Heat Stroke** (also known as sunstroke) is a life-threatening condition in which a person's body temperature control system stops working and the body is unable to cool itself.
- **Refer to the Heat Disorder Symptoms Chart on page 25 of this guide.**

Heat Index and Heat Disorders

The **Heat Index** (HI) is the temperature the body feels when heat and humidity are combined. The chart below shows the HI that corresponds to the actual air temperature and relative humidity. This chart is based upon shady, light wind conditions.

Exposure to direct sunlight can increase the HI by up to 15°F.

The local NWS will initiate weather statements/alert procedures when the Heat Index is expected to exceed 100°.



Know These Heat Disorder Symptoms

HEAT DISORDER	SYMPTOMS	FIRST AID
Sunburn	Redness and pain. In severe cases swelling of skin, blisters, fever and headaches.	Ointments for mild cases if blisters appear and do not break. If breaking occurs, apply dry sterile dressing. Serious, extensive cases should be seen by a physician.
Heat Cramps	Painful spasms usually in muscles of legs and abdomen. Heavy sweating.	Firm pressure on cramping muscles, or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue use of water.
Heat Exhaustion	Heavy sweating, weakness, cold, pale and clammy skin. Normal temperature possible. Fainting and vomiting.	Get victim out of sun. Lay down and loosen clothing. Apply cool, wet cloths. Fan or move victim to air conditioned room. Sips of water. If nausea occurs, discontinue use. If vomiting continues, seek medical attention.
Heat Stroke (Sunstroke)	High body temperature (106° F or higher). Hot dry skin. Rapid and strong pulse. Possible unconsciousness.	Do not give fluids. SUMMON EMERGENCY MEDICAL ASSISTANCE OR GET VICTIM TO HOSPITAL IMMEDIATELY. DELAY CAN BE FATAL.

Fun in the Sun Safety… The UV Index

The **UV Index** is a measure of the intensity of the sun's ultraviolet radiation in the sun burning spectrum. As the UV Index increases, the sun's rays can affect your skin, eyes and immune system. Therefore you need to take the necessary precautions to protect yourself from the harmful rays.

Developed by the National Weather Service and the Environmental Protection Agency, the UV Index predicts the next day's ultraviolet radiation levels on a scale from 1 (low) to 11+ (extreme) to help people determine appropriate sun-protective measures.

The table below indicates the protective actions you can take to protect oneself from overexposure to UV radiation.

Exposure Level	UV Index	Minutes to Burn	Protective Actions
Low	**< 2**	45	If you burn easily, apply SPF 15+ and protective clothing.
Moderate	**3—5**	30	Apply SPF 15+, protective clothing and UV sun glasses.
High	**6—7**	15	Apply SPF 15+, protective clothing, UV sun glasses and make attempts to avoid exposure to the sun during midday hours .
Very High	**8-10**	10	Apply SPF 15+, protective clothing, UV sun glasses and avoid being in the sun between 10am to 4pm.
Extreme	**11+**	< 10	Protection against sun damage is needed. Same actions as **Very High** and be sure to seek shade.

There are two prices to pay for overexposure to UV radiation; a severe sun burn following an intense short-term overexposure, and the more serious skin cancers developing after long-term exposure. *Melanoma*, the more deadly of the two types of skin cancer occurs when the person has been subjected to intense short-term overexposures. Non-melanoma skin cancers, which are almost 100% curable, occur in people who are overexposed for very long periods of time, (e.g. construction workers, farmers, or fisherman. Long-term overexposure to UV radiation has been linked to the formation of cataracts in the eyes as well.

Safe Boating Weather Tips

You should never leave the dock without first checking the local weather forecast. Checking the weather prior to leaving the dock is just as important in planning your trip as checking the fuel and required equipment. Special attention to weather and weather indicators can make the difference between a pleasant day on the water and a potential disaster.

Certain signs you can look for that indicate an approaching weather change:

- Although most weather changes come from the west, you should be observant of weather from all directions, so scan the sky with your weather eye, in all directions.
- A sudden drop in temperature and change in wind often mean that a storm is near. A rapid drop in barometric pressure means a storm is approaching.
- Watch for cloud build up, especially rapid, vertically rising clouds. Be alert for the sound of thunder.
- Watch for lightning and rough water. Boats, particularly sailboats, are vulnerable to lightning. There is no such thing as a lightning proof boat.
- Heavy static on your AM/FM radio may be an indication of nearby thunderstorm activity.
- Fog can create problems in inlets and bays or open water. Fog typically forms during temperature changes in early morning or evening hours and can persist for long periods of time.

Small Boat Safety Checklist

- Have an escape plan in mind. Weather related hazards form quickly. Never let storms cut off your route back to land.
- If weather threatens while afloat, be sure everyone is wearing a life jacket as small boats can be overturned or capsized by gusty winds.
- Listen to your local weather station for NWS forecasts, advisories, watches and warnings.
- Know the limitations of your boat for rough, choppy water conditions.
- Whenever possible, have a portable NOAA Weather Radio and AM/FM radio on board to keep informed of the weather.
- Fishing rods held high become excellent lightning strike conductors.

The National Weather Service Office in Bismarck issues Lake Wind Advisories for the larger lakes in North Dakota; Lake Sakakawea, Lake Audubon, Lake Oahe and Devils Lake.

Tips to Preventing Hypothermia

Think of hypothermia as the opposite of a heat stroke. Cold water dangerously accelerates the onset and progression of hypothermia since body heat can be lost 25 times faster in cold water than cold air. Hypothermia, the loss of body heat to the water, is probably the greatest cause of water related deaths. Often the cause of death is listed as drowning; but, most often the primary cause is hypothermia and the secondary cause is drowning. **Severe hypothermia may result in unconsciousness and possibly death.**

Hypothermia sneaks up on you, so you probably aren't the best judge of whether or not you are hypothermic.

Water Temperature (Degrees F)	Exhaustion or Unconsciousness	Expected Time of Survival
32.5	Under 15 minutes	Under 15-45 minutes
32.5 to 40	15 to 30 minutes	30-90 minutes
40 to 50	30-60 minutes	1 to 3 hours
50 to 60	1 to 2 hours	1 to 6 hours
60 to 70	2 to 7 hours	2 to 40 hours
70 to 80	3 to 12 hours	3 hours to indefinitely
Over 80	Indefinitely	Indefinitely

Treating Hypothermia

First Aid goals include:

- Preventing further heat loss
- Re-warming the victim
- Quickly getting professional medical help as needed

Minimize the victim's physical exertion when removing the victim from cold water. Once out of the water, gently remove wet clothing and cover the person with dry clothing or blankets. Protect the victim from wind, especially around the head and neck. Move the victim to a warm environment if possible and avoid re-exposure to the cold. Apply warm compresses and warm (not hot) liquids that are non-alcoholic and non-caffeinated also help to restore heat

Maximize Your Chances of Surviving:

- Wearing a Personal Flotation Device (PFD)
- Keeping clothing on
- Adopting a survival position
- Remain still unless you have a floating object, another person, or shore is nearby
- Keeping a positive mental outlook (a will to survive really does matter)

Be Aware, Be Prepared… Make a Plan

Everyone needs to prepare for the hazards that could affect their area. Morton County public safety officials urge every household to develop an emergency plan.

Where will your family and friends be when disaster strikes? They could be anywhere—at work, at school, out of town or in a car. How will you find each other? Will you know if your children are safe? Disaster may force you to evacuate your neighborhood or keep you in your home (shelter-in-place). What would you do if basic services such as water, gas, electricity, or telephones were cut off?

Know Your Risk

Gather information and stay attuned to local hazards. Find out what types of disasters could occur and how best to respond and protect yourself and family. Learn your community's warning signals, emergency broadcast information and how to stay informed!

Have a Plan

Discuss the information you have gathered and what you need to do to prepare for and respond to different types of emergencies. Pick two places to meet in case you are separated:

- A spot outside your home for an emergency such as fire.
- A location away from your neighborhood in case you can't return home.
- Discuss what you would do and where you would go if advised to evacuate.

Be Prepared

- Post emergency telephone numbers by phones and in your cell phones.
- Install safety features in your house, such as smoke alarms and fire extinguishers.
- Have your family learn basic safety measures, such as CPR and basic first aid; how to use a fire extinguisher; and how and when to turn off water, gas and electricity in your home.
- Teach children how and when to call 9-1-1.
- Routinely go over your emergency preparedness plans with family members.

North Dakota One-Call

North Dakota One-Call is the statewide One-Call notification system established to inform all North Dakota underground facility operators of intended digging/excavation.

Know what's below. Call before you dig.

Do I have to call North Dakota One-Call?

Yes! Calling North Dakota One-Call is a state law designed to protect you, your family, underground facilities and the public.

Planning a Do-It Yourself Project?

Planting a tree? Digging a hole for a mailbox? Installing a fence? Remember to contact North Dakota One-Call! There are a number of utility lines buried on your property—electric, telephone, gas, or propane, water, sewer, cable TV, etc. The first step to any project is **safety!** Damaging an underground utility can cause injury or even death.
Contact North Dakota One-Call and they will contact the utility line owners to locate their lines. These locates do not include any lines you may have installed to your private facilities (i.e. gas grills, detached garages, wells, yard lights, etc.) It's free, it's simple and it's the law.

Call 811 or 1-800-795-0555

What is my responsibility after I have filed my locate request?

After the markings have been made, excavators are required to maintain a minimum horizontal (side to side) clearance of two feet (24") between an unexposed facility and the cutting edge of any power operated excavating or earth moving equipment. For example, if the markings indicate a 6" pipe is buried, the "hand-dig zone" is 54" wide (3" + 24" on each side of the mark.) If excavation is required within the "hand-dig zone," the excavation must be performed very carefully, with a vacuum or hand tools to avoid damage to the underground utility line.

What do the markers and colors in my yard mean?

	Red - Electric Power Lines/Cables
	Yellow - Gas, Oil, Steam or Petroleum
	Orange - Communication - CATV
	Blue - Potable Water
	Purple - Reclaimed Water - Irrigation
	Green - Sewer and Drain Lines
	Pink - Temporary Survey Markings
	White—Proposed Excavation

I have hit a utility line; What do I do now?

The first thing you do is evacuate everyone if you have created a dangerous situation. Call 911 immediately and keep the area clear. Also call the utility company of the line you hit and make them aware of what has happened. If you don't have the utilities emergency phone number, you can call North Dakota One-Call (811) and get that information.

Emergency Phone Numbers

My Family Name: _____

My Phone Number: _____

My Address: _____

My City: _____

Police/Fire/Medical Phone Number: Dial 9-1-1

My Mother: _____

My Father: _____

Others: _____

Emergency Communications Plan

Talk with your family and decide how you will contact each other in the event of an emergency or disaster.

Out-of-Town Contact Name: _____ Phone Number: _____

Neighborhood Meeting Place: _____ Phone Number: _____

Evacuation Location: _____ Phone Number: _____

Complete the following information for each family member.

Name: _____ Name: _____

Date of Birth: _____ Date of Birth: _____

Social Security Number: _____ Social Security Number: _____

Name: _____ Name: _____

Date of Birth: _____ Date of Birth: _____

Social Security Number: _____ Social Security Number: _____

Write down locations where your family member spend the most time: Work, school, daycare, etc.

Location: _____ Location: _____

Address: _____ Address: _____

Phone Number: _____ Phone Number: _____

Location: _____ Location: _____

Address: _____ Address: _____

Phone Number: _____ Phone Number: _____

Additional Sources of Information

Morton County Web site—http://www.co.morton.nd.us/
Contains information regarding Morton County Departments and all services available to the public and citizens of Morton County. A copy of this guide is posted on the Morton County Web site; click on the Severe Summer Weather and Wildfire Preparedness Guide.

American Red Cross—http://www.redcross.org
The American red cross has many materials available to citizens wanting to expand their knowledge of disaster preparedness information.

Federal Emergency Management Agency (FEMA) —http://www.fema.gov
FEMA's primary mission is to assist states, communities, businesses and individuals get through a disaster. It also administers the National Flood Insurance Program (NFIP) available to homes and businesses.

Citizen Corps—http://www.citizencorps.gov
Citizen Corps is FEMA's grassroots strategy to bring together local government and community leaders to involve citizens in all-hazards emergency preparedness and resilience. Citizen Corps asks you to embrace the personal responsibility to be prepared; to get training in first aid and emergency skills; and to volunteer to support local emergency responders, disaster relief and community safety.

Ready America/Business/Kids—http://www.ready.gov
A web site sponsored by FEMA and Citizen Corps to assist families, businesses, and children to be prepared.

North Dakota One Call—http://www.ndonecall.com
Call before you dig! The first step in any project is **"think safety!"**

ND Department of Transportation—http://www.dot.nd.gov/
A source of information regarding current road conditions and travel information as you plan your summer travels throughout North Dakota.

ND Department of Agriculture—http://www.nd.gov/ndda/
A source of information for livestock producers regarding animal health and safety issues.

ND Department of Emergency Services—http://www.nd.gov/des/
This state agency provides communications and coordination support to local and tribal governments for the planning, preparedness, response and recovery to local disasters. This agency coordinates deployment of regional mutual aid assets, as well as activation of state and federal resources during declared disasters.

National Weather Service, Bismarck Office—http://www.weather.gov/bis
The National Weather Service (NWS) provides weather, hydrologic and climate forecasts and warning for the United States, its territories and adjacent waters and ocean areas.